

Solving Trig Equations - Review Homework

Solve each of the following equations, giving a general solution for each.

1. $\tan 2x - 1 = 0$

2. $\sin^2 x - 2\sin x - 3 = 0$

3. $\sin x = \cos x$

4. $\cos x = 3\cos x + 1$

5. $4\tan x + \sin 2x = 0$

6. $4\cos^2 x - 4\cos x + 1 = 0$

7. $3\cos x - 2\cos x \sin x = 0$

8. $10\sin^2 x - 7\sin x = 6$

9. $2\sin 2x = 1$

10. $3\sin^2 x - \cos^2 x = 0$

11. $4\sin^2 x - 1 = 0$

12. $\sqrt{3}\cot x \sin x + 2\cos^2 x = 0$

13. $\sin^2 x - 3\sin x + 2 = 0$

14. $3\tan^2 x + 4\sec x = -4$

15. $\sin 2x \sin x + \cos 2x \cos x = 1$

16. $2\sin x \cos x + 4\sin x = \cos x + 2$